# The San Joaquin Valley Plug-In Electric Vehicle Readiness Plan

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# Valley's Need for Zero/Near-Zero Emissions Technologies for Mobile Sources

- Valley already has toughest air regulations in the nation
  - Adopted over 600 stringent rules and regulations
- More than 80% of the NOx inventory in the Valley is attributed to mobile sources
  - No direct regulatory authority over mobile sources
- Despite major reductions in emissions, virtually impossible to attain new air quality standards without implementation of transformative measures
- More than 90% reductions in emissions needed to attain federal standards
  - Need significant advancements in zero/near-zero emissions technologies for mobile sources
- 23 of 30 most disadvantaged communities in SJV



## San Joaquin Valley PEV Readiness Plan

- Completed in 2014 in partnership with the Center for Sustainable Energy
- Serves as a tool for planning for regional EV infrastructure deployment
- Builds upon 2012 San Joaquin Valley PEV Community Assessment
  - Evaluated level of EV Readiness among jurisdictions in SJV
  - Identified barriers to more widespread adoption of EV technology
- Convened Plug In Electric Vehicle Coordinating Council
  - Comprised of local governments, industry professionals and interested stakeholders
  - Tasked with prioritizing barriers and developing resources to address barriers

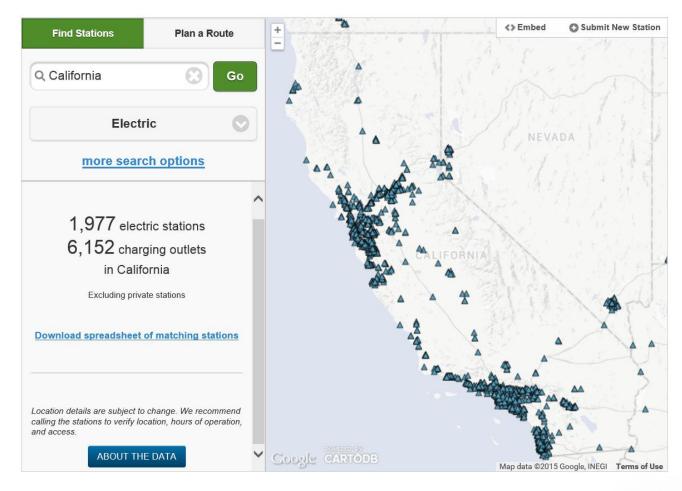
# Barriers to EV Adoption in San Joaquin Valley

- Upfront cost of electric vehicles:
  - 20% of population below poverty line
  - 23 of 30 most disadvantaged communities in San Joaquin Valley
  - New vehicles of any kind, let alone EVs out of reach for many
  - Must provide increased incentives and innovative programs
- Lack of Public Awareness:
  - Educate low income and rural communities on the benefits of EVs
  - Shape the perception of EVs as a viable transportation method and as a reliable primary household vehicle for all Valley residents
  - Target consumers in EJ communities with specific resources necessary to promote the viability of EVs;
  - Leverage existing state and District incentives that promote EV affordability

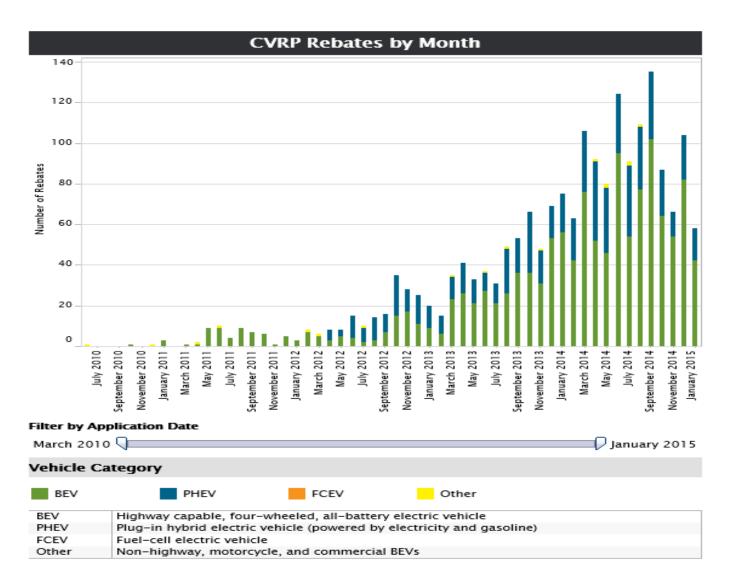


## Barriers to EV Adoption in SJV

#### Lack of Infrastructure:







Center for Sustainable Energy (2015). California Air Resources Board Clean Vehicle Rebate Project, Rebate Statistics. Data last updated June 08, 2015. Retrieved January, 2015 from <a href="http://energycenter.org/clean-vehicle-rebate-project/rebate-statistics">http://energycenter.org/clean-vehicle-rebate-project/rebate-statistics</a>

#### District Initiatives to Advance EVs

- Action Plan for Promoting the Use of Clean Passenger Vehicles in the San Joaquin Valley
  - Approved by Governing Board in 2014
  - Included approval of PEV Readiness Plan
  - Supports continued implementation of District programs targeted at encouraging adoption of EVs
  - Authorized new EV charging infrastructure program
- Drive Clean! Rebate Program
- Public Benefit Grants Program
- Enhanced Fleet Modernization Program and Plus Up
- Charge Up! Program



#### District Initiatives to Advance EVs

#### Drive Clean! Rebate Program

- Rebates to public for purchase of advanced vehicle technology
- Up to \$3,000 for PEVs
- Can be layered on top of CVRP incentive
- 1,742 rebates processed

#### Public Benefit Grants Program

- Incentives for public agencies to purchase advanced technology vehicles
- Up to \$20,000 per vehicle for PEVs
- 623 vehicles purchased



#### District Initiatives to Advance EVs

- Enhanced Fleet Modernization Program and Plus Up
  - Incentives for low income residents in disadvantaged communities to purchase cleaner vehicles and scrap existing vehicles
  - Run through District's Tune In Tune Up Vehicle Repair Program
  - Funding up to \$12,000 per vehicle if PEV is purchased
  - Leverages CVRP, Drive Clean!, EFMP and Plus Up incentives
- Charge Up! Program
  - Newly launched incentive program for public access EV infrastructure purchase and installation (Launched June 1, 2015)
  - Open to public agencies and businesses
  - Provides funding for level 2 and level 3 (DC Fast Charge) chargers
    - \$5,000 per unit for single port
    - \$6,000 per unit for dual port
    - Level 3 funded on case by case basis
    - Up to \$50,000 maximum per applicant
    - Program funding initially limited to \$2 million



#### Conclusions

- Charging infrastructure is critical in San Joaquin Valley for increased adoption of EVs
- Necessary to fill in gaps in existing statewide network
- Current suite of incentives for purchase of EVs among highest in state, focus on disadvantaged communities
  - 23 of 30 most disadvantaged communities in San Joaquin Valley
- Efforts are working to increase number of EVs (13 fold increase)
- Infrastructure lagging well behind coastal and more urbanized areas of the state
- Current District infrastructure funding a good start, but not enough to fill need



### **Contact Information**

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